

Parameter	Description	Baseline Value
$t$	Time in days	
$r_{m_j p_i}$	Biting rate per day to primates by mosquito $j$ [1, 2]	0.5 days $^{-1}$
$b_{p_i m_j}$	Baseline transmission probability, from primate $i$ to mosquito $j$	0.3
$b_{m_j p_i}$	Baseline transmission probability, mosquito $j$ to primate $i$ [1, 3, 4]	0.3
$c_j$	Percent of the magnitude of seasonal variation for mosquito $j$	between (0, 1), 0.05 unless otherwise specified
$\mu_{p_i}$	primate birth rate (= 1/lifespan) [5]	1/(15 * 365) to 1/(60 * 365) days $^{-1}$
$\nu_{p_i}$	Primate death rate, set equal to birth rate	
$\gamma_{p_i}$	Primate recovery rate [6, 7, 8]	1/4 days $^{-1}$
$\mu_{m_j}$	Mosquito $j$ birth rate	1/7 days $^{-1}$
$\nu_{m_j}$	Mosquito death rate, set equal to birth rate	
$\rho$	Mosquito rate of transovarial transmission	0
$\iota$	Rate of infectious introduction	0 – 10 $^{-4}$ years $^{-1}$

Table S1: **Model Parameters** Justifications for baseline values not given above are given in subsequent sections.

## References

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- [6] Gubler DJ, Suharyono W, Tan R, Abidin M, Sie A. Viraemia in patients with naturally acquired dengue infection. *Bull World Health Organ.* 1981;59(4):623-30.
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